

REMARKS

Acknowledgement of Allowable Subject Matter

Applicant thanks the Examiner for indicating the allowability of claims 7 and 25 once amended to be rewritten in independent form to include the limitations of the base claim and any intervening claims. Applicant defers amending the claims to give the Examiner the opportunity to consider Applicant's remarks enclosed herein.

Rejection of Claims 1-5, 8-10, 16-19, 20, and 21 under 35 U.S.C. § 103(a) as being unpatentable over U.S. Pat. No. 6,084,869 (Fishman) in view of U.S. Publ. No. 2004/0264397 (Benveniste) in further view of U.S. Pat. No. 7,245,946 (Liu)

Fishman is directed towards reserving channel resources in a packet-switched multiple-path communication system. See Fishman Abstract. Fishman FIG. 1 describes a system where multiple very small aperture terminals (VSATs) communicate with each other using a network control centre 16 (NCC). The NCC 16 has a set each of transmitting and receiving antenna, to enable the VSATs to communicate. Further, each VSAT transmits a reservation request clearly indicating the period of time to be reserved for transmission. See Fishman col. 3 lines 51-61. Furthermore, the VSAT can receive a message indicating reservation of other stations at any instant from the relay system. See Fishman col. 3 line 61 to col. 4 line 5. Note that a person of ordinary skill in the art would not consider a satellite system equivalent to a "wireless local area network" as recited in the preamble of claim 1.

Benveniste is directed towards a method for coordinating the delivery of frames to, and the receipt of frames from, a power-saving station in a wireless local-area network (LAN). Operationally, Benveniste establishes a wake-up schedule for the power-saving station (such as a notebook computer, a personal digital assistant (PDA), or a tablet PC) based on a temporal period and temporal offset that reduces the frequency with which multiple stations in a network wake up simultaneously, thereby reducing power consumption in the power-saving station. See Benveniste Abstract and para [0007].

Liu is directed towards a system and method that utilizes a scheduler based on a transmission power consumption calculation and prioritizing algorithm. The system includes an access point having a priority queue, one or more stations, an Automatic Power Saving Delivery (APSD) frame with an association ID for identifying one of the stations, and a scheduled wake-

up time for the identified station. An algorithm is employed for calculating the total transmission power consumption of downlink data for the stations. The current data to be transmitted to each station is accessed by the algorithm to determine the total transmission power consumption to each station. A priority queue in the access point (AP) is ordered from the lowest to the highest receiving power consumption, assigning the highest priority to the lowest power consumption transmission to minimize total power consumption to the stations in the AP queue. See Liu Abstract.

It is well known in the art that VSATs are stationary and connected to a direct power supply and do not require batteries. Thus, the sleeping and awakening process for the mobile stations of Benveniste is not applicable to the VSATs of Fishman, and the Office Action's stated motivation to combine Fishman's scheduling and Benveniste's wake-up to "be able to conserve the [VSAT] terminals' power while it is in the inactive mode" is faulty. First, Fishman's VSATs do not have an inactive mode. Second, there is no need for power conservation in a VSAT.

Also due to the fact that Fishman's VSATs are stationary and directly powered, one of ordinary skill in the art would not be motivated to combine Liu's periodic beacons with Fishman's reservation process. Periodic signaling is often employed in mobile systems to allow for sleep or idle times (see Liu col. 3 lines 38-42 and col. 5 lines 30-31), but a drawback to periodic beacons is that information that becomes available between beacons is delayed until the next beacon transmission. Given that there is no need to create sleep or idle periods for Fishman's VSATs, a person of ordinary skill in the art would not be motivated to deliberately delay the beacon information using periodic signaling. See Fishman col. 1 lines 35-43.

Thus, Applicant respectfully submits that there is no motivation to combine Fishman with Benveniste and/or Liu.

Assuming *arguendo*, that the teachings of Benveniste and Liu were to be combined with those of Fishman, adding Benveniste's doze/asleep mode for portable stations or Liu's power-saving sleep mode for mobile stations to Fishman's VSAT transmit and receive modes would affect the reliability of Fishman's VSATs to properly receive reservation messages from the relay system, because sleeping means that the MS is neither transmitting nor receiving. See Benveniste para [0010], where Benveniste clearly states that "*When a station powers off its radio, the station is said to enter the doze state. A station wakes up from the doze state by powering on its radio to enter the alert state. While a station is in the doze state, it cannot*

transmit or receive signals, and is said to be asleep.” Therefore, even the improperly combined teachings of Fishman, Benveniste, and Liu are not sufficient to render the claims *prima facie* obvious because the proposed modification to Fishman provided in the Office Action would render it to be unsatisfactory for its intended purpose. *See, e.g.* M.P.E.P. § 2143.01(V).

Lastly, Applicant respectfully submits that Benveniste specifically teaches against “receiving a beacon transmission from the access point comprising first information that corresponds to times when other subscriber units are proposing to utilize the shared wireless communication resource” as recited by independent claim 1. According to Benveniste para. [0021], a station, prior to switching to a power-save mode, sends a request to an access point 101 that specifies a desired temporal period for subsequent wake-up that is independent of beacons. The access point determines, based on existing transmission schedules (e.g., polling schedules, wake-up schedules, etc.), whether to accept or reject the request. If the access point accepts the request, then the access point determines, based on existing wake-up schedules, a temporal offset that will reduce the occurrence of concurrent wake-ups, and sends a positive notice with the temporal offset to the station.

Thus, there is no need for a station to know the transmission schedules of other stations and Benveniste teaches away from “receiving a beacon transmission from the access point comprising first information that corresponds to times when other subscriber units are proposing to utilize the shared wireless communication resource” as recited in independent claim 1. Independent claims 8 and 16 recite similar features.

For the above reasons, Applicant submits that claims 1, 8, and 16 are not obvious in view of the combination of Fishman, Benveniste, and Liu. Dependent claims 2-5, 9-10, and 17-21 depend from, and include all the limitations of independent claims 1, 8, and 16. Therefore, Applicant respectfully requests reconsideration and withdrawal of the rejection of claims 1-5, 8-10, and 16-21 under 35 U.S.C. § 103(a) in view of Fishman, Benveniste, and Liu.

Rejection of Claims 22 and 24 under 35 U.S.C. § 103 (a) as being unpatentable over U.S. Pat. No. 6,084,869 (Fishman) in view of U.S. Publ. No. 2004/0264397 (Benveniste) in view of U.S. Pat. No. 7,245,946 (Liu) in further view of U.S. Pat. No. 6,192,230 (vanBokhorst)

In continuation of the explanation above, Applicant respectfully submits that the combination of Fishman, Benveniste, and Liu does not describe or suggest “a plurality of

proposed times received from the access point at which other subscriber units have proposed to utilize the shared wireless communication resource” as recited by claim 22.

vanBokhorst is directed towards a wireless data communication system operating in a power saving mode, wherein stations communicating in the wireless data communication system switch between an awake state and a doze state to save power. See vanBokhorst Abstract.

vanBokhorst fails to remedy the previously-mentioned deficiency of Fishman, Benveniste, and Liu. Thus, claim 22 is also not obvious in view of Fishman, Benveniste, Liu, and vanBokhorst. Dependent claim 24 depends from, and includes all the limitations of independent claim 22. Therefore, Applicant respectfully requests the reconsideration and withdrawal of the rejection of claims 22 and 24 under 35 U.S.C. § 103(a) in view of Fishman, Benveniste, Liu, and vanBokhorst.

Rejection of Claims 6, 11-13, and 15 under 35 U.S.C. § 103 (a) as being unpatentable over U.S. Pat. No. 6084869 (Fishman) in view of U.S. Publ. No. 2004/0264397 (Benveniste) in view of U.S. Pat. No. 7245946 (Liu) in further view of U.S. Publ. No. 2004/0013135 (Haddad)

As explained above, Benveniste teaches away from “receiving a beacon transmission from the access point comprising first information that corresponds to times when other subscriber units are proposing to utilize the shared wireless communication resource” as recited in independent claim 1. Independent claim 8 recites similar features.

Haddad is directed towards a transmission method for both voice and data packets as an enhancement of the IEEE 802.11 protocol of wireless local area networks. See Haddad Abstract. Haddad fails to remedy the previously-mentioned deficiency of Fishman, Benveniste, and Liu.

Dependent claims 6, 11-13, and 15 depend from, and include all the limitations of independent claims 1 and 8. Therefore, Applicant respectfully requests the reconsideration and withdrawal of the rejection of dependent claims 6, 11-13, and 15 under 35 U.S.C. § 103(a) in view of Fishman, Benveniste, Liu, and Haddad.

Conclusion

Applicant respectfully requests that a timely Notice of Allowance be issued in this case. Such action is earnestly solicited by the Applicant. Should the Examiner have any questions,

comments, or suggestions, the Examiner is invited to contact the Applicant's attorney or agent at the telephone number indicated below.

Please charge any fees that may be due to Deposit Account 502117, Motorola, Inc.

Respectfully submitted,

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